

State of Washington  
Governor's  
Salmon Recovery  
Office



2006

State of Salmon in  
Watersheds



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**Laura Till**  
Washington Department of  
Fish and Wildlife

## PROJECT PHOTOS

Courtesy of Salmon Recovery  
Funding Board, Regional Recovery  
Organizations, Lead Entities, and  
Tulalip Tribes

## LANDSCAPE PHOTOS

**Chris Drivdahl**  
Governor's Salmon  
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Salmon, from the Latin *salmo*, to leap.



## Our Vision

To restore salmon, steelhead, and trout to healthy harvestable levels and improve habitats on which fish rely.

CHRIS DRIVDAHL



# Our Goals and Strategies

## Wild salmon populations will be productive and diverse

- ▶ Sustain salmon productivity by providing wild spawner escapement, conserving genetic diversity, and meeting basic needs of salmon for spawning, rearing and migration in watersheds and ecosystems. Stewardship of salmon will be the first priority in managing the resource.
- ▶ Meet the goal of the Endangered Species Act to return endangered and threatened species to the point where salmon no longer need the statute's protection.

## We will have coordinated, science-based salmon recovery efforts

- ▶ Achieve cost-effective salmon recovery and use government resources efficiently.
- ▶ Use the best available science and integrate monitoring and research with planning and implementation.
- ▶ Ensure that citizens, salmon recovery partners and state employees have timely access to information, technical assistance and funding they need to be successful.

## Our habitat, harvest, hatchery, and hydropower activities will benefit wild salmon

- ▶ Freshwater and estuarine habitats are healthy and accessible.
- ▶ Rivers and streams have flows to support salmon.
- ▶ Water is clean and cool enough for salmon.
- ▶ Hatchery practices meet wild salmon recovery needs.
- ▶ Harvest management actions protect wild salmon.
- ▶ Compliance with resource protection laws is enhanced.

## Citizens and salmon recovery partners are engaged

- ▶ Create partnerships among governments and citizens. Provide leadership, coordination and technical assistance to create agreements on salmon recovery decision-making frameworks and recovery plans. Integrate scientific data with local knowledge and build in local flexibility and control.
- ▶ Inform, build support, involve and mobilize citizens to assist in restoration, conservation and enhancement of salmon habitat.

## We will meet Endangered Species Act and Clean Water Act requirements

- ▶ Strengthen land, water, and fishery management policies, programs, and activities to avoid, minimize, and mitigate human impacts on salmon populations and their habitat.
- ▶ Seek Endangered Species Act compliance for state guidelines, regulations, and plans; permitting activities; funding of projects/activities; and state lands, facilities, and infrastructure.

# Salmon Recovery Milestones 1990-2006

1990

**1990** Ocean and Puget Sound marine coho and chinook fishing restrictions are underway to address coho population declines coast-wide.

**Regional Fisheries Enhancement Groups** are created by the Legislature.

**1991** Federal government lists Snake River sockeye salmon as endangered.

**1992** Federal government lists Snake River summer and fall chinook salmon as threatened.



**1993** **Wild Stock Restoration Initiative and Wild Salmonid Policy** adopted by Department of Fish and Wildlife.

The Columbia River hydropower **biological opinion (BiOp)** is issued by federal agencies.

**1994** The federal government adopts the **Northwest Forest Plan**.

A federal court rejects the 1993 BiOp.

**1995** The federal government initiates overhaul of the way the federal power system is to be operated on the Columbia River.

**1996** Department of Natural Resources adopts a **Habitat Conservation Plan** for 1.4 million acres of state-owned forestland.



1992

**1997** Governor Locke brings together the state agencies that most affect salmon management in a forum called the **Joint Natural Resources Cabinet**.

The federal government lists Snake River steelhead as threatened and Upper Columbia steelhead as endangered.



**1998** Governor Locke and Canadian Fisheries and Ocean Minister Anderson reach agreement to reduce fisheries.

The Legislature establishes the **Governor's Salmon Recovery Office**.

The **Independent Science Panel** is appointed by the Governor from recommendations by the American Fisheries Society.

**Watershed Planning Units** are created by the Legislature.

**Lead Entities** are also established by the Legislature.

The **Forests and Fish Agreement** is signed.

**Lower Columbia Fish Recovery Board** is established by the Legislature in Clark, Cowlitz, Lewis, Skamania, and Wahkiakum counties.



1993

1994

1995

1996

1997

Federal government lists Lower Columbia River steelhead, and Upper Columbia, Northeast Washington, Lower Columbia, and Snake River bull trout as threatened.



**1999** Locke/Anderson re-negotiate the landmark **Pacific Salmon Treaty**, providing a federal fund from which salmon restoration activities are to be paid.

The **Forests and Fish Agreement** becomes state law.

The **Salmon Recovery Funding Board** is established by the Legislature.

The **Statewide Strategy to Recover Salmon: Extinction is Not an Option** is completed.

Washington, Oregon, four Columbia River Treaty Tribes, and the federal government sign the **Columbia River Accord**.

Federal government lists Puget Sound Chinook, Hood Canal summer chum, Washington Coastal Lake Ozette sockeye, Lower Columbia River Chinook, Lower Columbia River chum, and Middle Columbia River steelhead as threatened. In addition, Upper Columbia spring Chinook is listed as endangered.



ESA listings of Chinook, coho, chum, and steelhead stocks in Washington now cover over 75% of the state.



1998	1999	2000	2001	2002	2003	2004	2005	2006
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**2000** Congress creates a federal hatchery reform initiative and establishes an independent **Hatchery Scientific Review Group**.

National Marine Fisheries Service and US Fish and Wildlife Service re-issue Biological Opinions for Federal Columbia River Power System operations.

The first **State Agency Action Plan**, a biennial implementation plan for the Statewide Strategy, is published.

The state's performance management system—**Salmon Recovery Scorecard**—is published.



The first **State of Salmon Report** is published.

**2001** The Legislature mandates development of a **Comprehensive Monitoring Strategy** and action plan for watershed health with a focus on salmon recovery

**2002** **Recovery Plan Model** is published.

**2002 State of Salmon Report**, the 2001-2003 State Agency Action Plan, and the 1999-2001 Action Plan Accomplishments are released.

**The Comprehensive Monitoring Strategy** is developed for consideration by the Governor and Legislature.

**2003** **Regional Salmon Recovery Organizations** receive funding from the Salmon Recovery Funding Board to develop salmon recovery plans for listed salmon. These groups, working closely with local citizens, are the only organizations developing recovery plans for the purposes of the Endangered Species Act.

A federal judge hands back the **2000 Biological Opinion on operation of the Federal Columbia River Power System** for salmon and steelhead to NOAA Fisheries. The federal agency was told to resolve several deficiencies, including reliance on federal mitigation actions that have not undergone section 7 consultation under the Endangered Species Act, and reliance on range-wide off-site non-federal mitigation actions that are not reasonably certain to occur.

The Governor's Salmon Recovery Office produces the **2003-2005 State Agency Action Plan**, the third biennial implementation plan for the Statewide Strategy to Recover Salmon.



**2004** The Governor signs Executive Order 04-03, creating the **Governor's Forum on Monitoring**. This Order establishes a coordinating body for monitoring salmon recovery and watershed health.

All Washington sub-basins submit their draft **Fish and Wildlife Sub-basin Plans** to the Northwest Power and Conservation Council on time. Collectively, the plans represent the largest compilation of data on fish, wildlife and environmental conditions ever in the Columbia River Basin.

The federal government issues a **Draft Hatchery Policy**, indicating how hatchery fish will be considered in salmon recovery, and revises its Status Reviews for listed fish in Washington. The latter proposes to down list Upper Columbia steelhead from endangered to threatened, and lists Lower Columbia coho for the first time as threatened. All other listings in Washington are proposed to remain as previously listed.

The Federal Energy Regulatory Commission approves a 50-year **Mid-Columbia Habitat**



**Conservation Plan** as part of the relicensing process for three mid-Columbia dams.

The Lower Columbia Fish Recovery Board completes the **first salmon regional recovery plan** in Washington.

The Governor's Salmon Recovery Office publishes the **2004 State of Salmon in Watersheds Report**.

**2005** **Draft recovery plans are completed** and delivered to NOAA-Fisheries for Puget Sound, Hood Canal, Middle Columbia, Upper Columbia, and Snake River Regions.

NOAA-Fisheries lists Lower Columbia coho as a threatened species, and down-lists Upper Columbia steelhead from endangered to threatened.

**2006** **NOAA-Fisheries adopts the Lower Columbia recovery plan**, stating they were "...committing to implement the actions in the Interim Plan and supplement...work cooperatively on implementation...and encourage other Federal agencies to implement actions..."

NOAA-Fisheries places notices in the federal register of **intent to adopt interim recovery plans from all Washington salmon recovery regional organizations**.

A Habitat Conservation Plan for 1.6 million acres of forested state trust lands—mostly in Western Washington—in the range of the northern spotted owl is adopted by the federal government. This 70-year management plan is an agreement between DNR and federal agencies under the Endangered Species Act to guarantee that habitat commitments are met, while not penalizing the occasional incidental "take" of a federally listed animal or its habitat.

// It is my hope  
that the enthusiasm  
and spirit [to recover salmon]  
in communities across the  
state will continue for years  
to come. //

GOVERNOR  
CHRISTINE GREGOIRE

CHRIS DRIVDAHL





# A letter from the Governor



Dear Reader:

The 1998 Washington Legislature had a bold vision. They believed Washingtonians knew how to protect and recover salmon, better than anyone else. They asked citizens to take the lead in salmon recovery by combining local and regional efforts into

a collaborative, statewide approach that would ensure public participation in salmon recovery.

Since then, many different groups and individuals across Washington have stepped up to this challenge. Representatives from agriculture, business, state and tribal governments, watershed coalitions and volunteer organizations came together and got to work.

Rather than waiting for direction from the federal government, we took the initiative and worked to develop salmon recovery plans from the bottom up. Today, these recovery plans are guiding major protection, recovery and restoration projects.

We have asked the federal government to adopt these plans under the Endangered Species Act. This has not been a simple undertaking and it is likely that nowhere in the United States has seen a grassroots effort quite like what has unfolded

in Washington. These plans serve as the beginning, not the end, of a tremendous amount of work to reclaim salmon populations that are healthy, harvestable and sustainable.

However, the best plans produce results, so we now must ask ourselves, "Are we making a difference?" We must demonstrate a good return on taxpayer dollars and we must be accountable, not only to the people who are funding our efforts, but to future generations as well. These questions and our answers will determine if we are successful and whether our grandchildren will enjoy the bounty and beauty of these great fish.

I am proud of efforts in Washington on behalf of salmon recovery. It is my hope that the enthusiasm and spirit in communities across the state will continue for years to come. Thank you for your interest in, and your dedication to, protecting this important part of our shared heritage.

Sincerely,

A handwritten signature in blue ink that reads "Chris Gregoire". The signature is fluid and cursive, with the first name "Chris" and last name "Gregoire" clearly legible.

**CHRISTINE O. GREGOIRE**  
WASHINGTON STATE GOVERNOR  
DECEMBER 2006

# Preface

This is the fourth in a series of biennial State of Salmon Reports. They have evolved over time in response to the emergence of recovery plans, and to better provide the most important information to our citizens and decision-makers in the clearest way possible.

Tracking and understanding the performance of our recovery efforts is challenging because of the diversity, technical complexity, and magnitude of actions being taken. Recovery actions are occurring across the state, from habitat restoration project sites in watersheds, to region-wide approaches for resource management, to statewide programs that affect how resources are regulated.

Recovery plans uniquely draw upon local and statewide actions, and add actions that are needed to address factors limiting salmon at the scale of the regional plan.

As the actions called for in recovery plans are being implemented, we need to be able to answer things like, "How are we doing?" "Have we made it?" "How much farther do we have to go?"

CHelan County Lead Entity





// The conservation of a great fishery resource involves a variety of circumstances, concerning which there is a dearth of information at the present time... //

US COMMISSIONER OF FISHERIES REPORT, 1937

## Performance Monitoring Is Key

Without measuring the right things, we won't be able to tell how we are doing or if we need to adjust our course. In the last State of Salmon Report, we used a three-tiered approach to reporting our progress—at watershed, regional, and statewide scales. In this report we continue that approach and refine our look at information and monitoring from all three perspectives.

**1 Watershed Scale** Each watershed is complex, and people who are working to recover salmon want to see how their efforts are progressing. Watershed-scale monitoring is important because salmon will be recovered watershed-by-watershed, population-by-population. Protection and restoration actions are designed to address the specific limiting factors identified in each watershed, and we need to collect information at this scale to determine if we are solving those problems. Key high-level indicators at this scale will help inform local decision-makers and watershed partners about progress they are making, and should roll-up into indicators at other scales.

**2 Regional Scale** Our salmon recovery regions have been closely aligned with Evolutionarily Significant Units (ESUs), the scales at which salmon are listed under the Endangered Species Act (ESA). The many watershed and population actions must be rolled up to regional/ESU scales, and in turn, the status and trends of key indicators must be evaluated across the watersheds into a regional picture to see whether the listed species and their habitats are recovering. Key high-level indicators at the regional scale are important for regional decision-makers, stakeholders, and citizens to understand how well their plan is progressing. Regional indicators will be essential for providing NOAA with the information it needs to make ESA delisting decisions.

**3 Statewide Scale** This is the highest-level view and is represented by our "Baker's Dozen Dials." It is intended to give Congress, the Governor, and legislators a quick snapshot of what is happening in recovery across the state. Even more than for the other two scales, it requires much simplification and "plain talk" and because of its coarse scale, information that contributes to these indicators at the regional and watershed scales is typically masked. But, it is valuable as a quick and easy to understand the big picture of our progress.

Monitoring is occurring at each of these three scales, although many gaps exist. In addition, the parties tracking information can vary within and across scales, and often the data must meet other needs and mandates, which makes taking full advantage of what we have difficult. However, in keeping with our previous commitments, we attempt to make full use of all existing information.

It is still much too early to know if our efforts are working, and trends are still difficult to assess. But, we think this is a snapshot of important information that will help guide us in future decisions about this important part of our Northwest landscape.

## 2006 Salmon Recovery | High Level Indicators



The art and science of measuring our progress have been evolving since we first began work on them in 1999. We still maintain the guiding principles of simplicity, brevity, objectivity, and clarity as we try to perfect the best set of statewide high-level indicators that can answer the questions people most want to know about our progress in salmon recovery. This year we have added hydropower, one that we feel will round out the picture of the four H's: Habitat, Harvest, Hatcheries, and Hydropower.

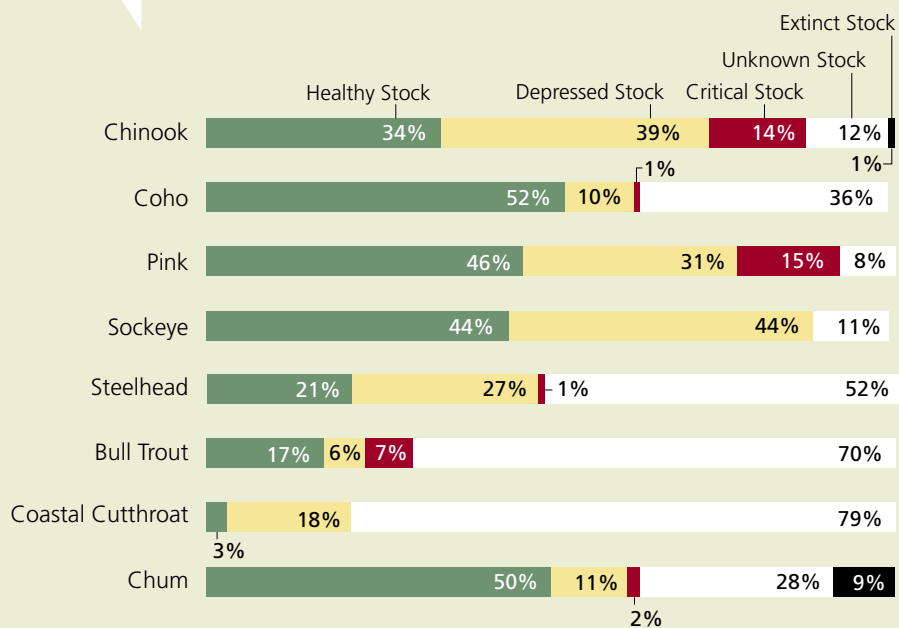
As in previous reports, these are the basic "dials" we are using as indicators of our work in salmon recovery. Because they are very general and represent a roll up of regional and watershed information, they mask much of what is going on at those other scales. However, they offer a quick and easy-to-understand reference point that relates to statewide questions of greatest interest.

As always, the more detailed information that lies beneath these indicators can be accessed through Washington's natural resource data portal at [www.swim.wa.gov](http://www.swim.wa.gov)

► These basic "dials" are indicators of our work in salmon recovery. They offer a quick and easy-to-understand reference point that relates to statewide questions of greatest interest.



## Fish Status Summary

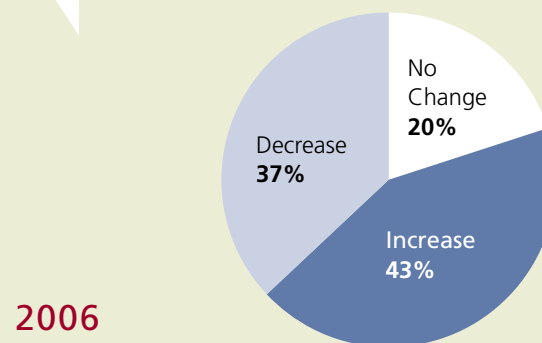


► Status ratings are determined by the Washington Department of Fish and Wildlife and tribes.

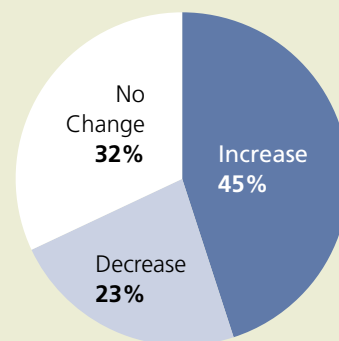
► Summary is for 2006.

DATA SOURCE: WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

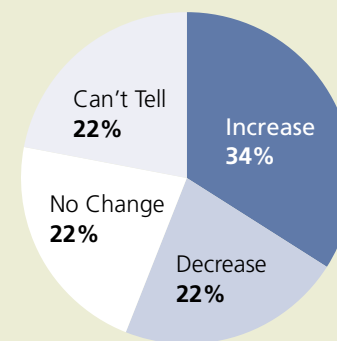
## Trends in Wild Juvenile Salmon Production



2006



2004

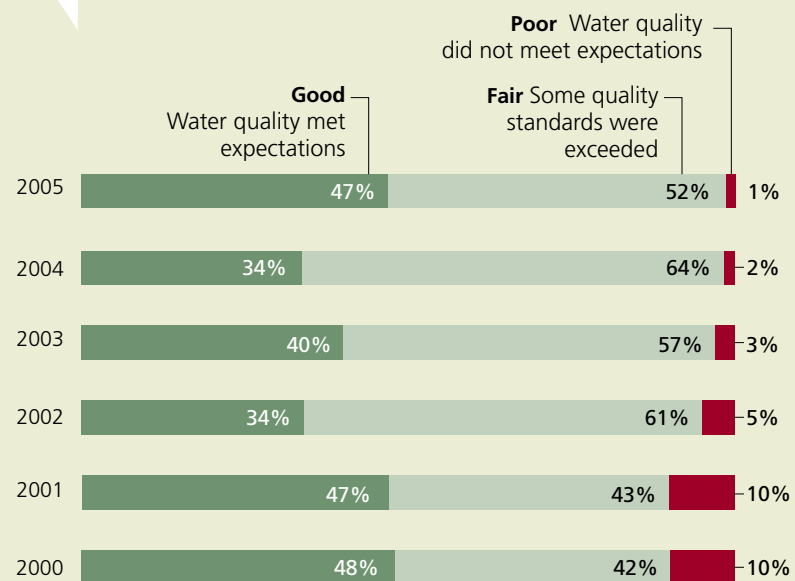


2002

► Pie charts represent 32 sampled stocks of all species statewide whose trends were increasing, decreasing, not changing, or unknown.

DATA SOURCE: WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

## Water Quality in Watersheds



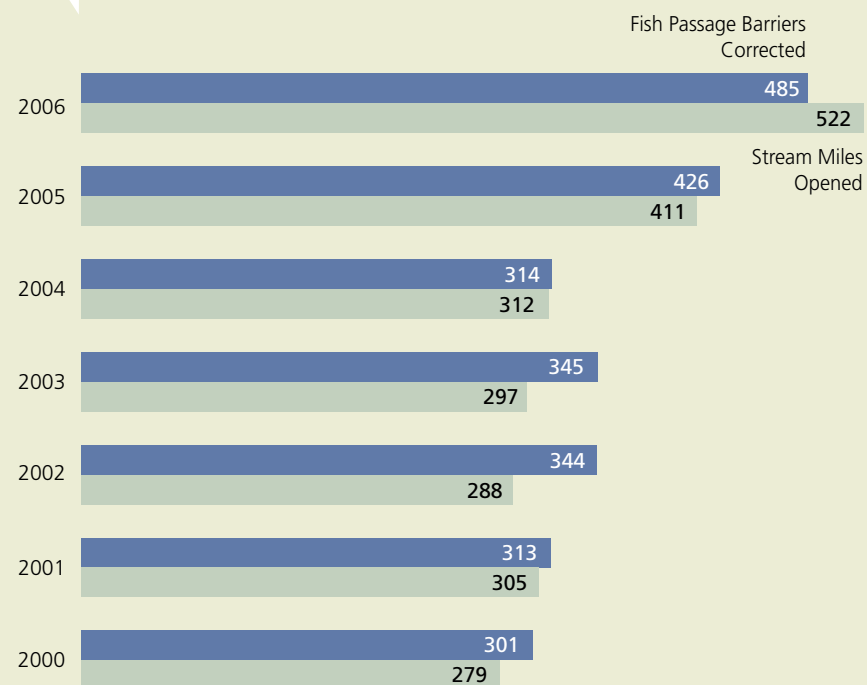
Water quality is measured by **Water Quality Index (WQI)**. This is a number that aggregates water quality data at a monitoring station for temperature, pH, fecal coliform bacteria, dissolved oxygen, nutrients, and sediments over a 12 month period.

62 sampling stations are monitored statewide in 62 watersheds.

A water year runs from October 1 until September 30.

DATA SOURCE: WASHINGTON DEPARTMENT OF ECOLOGY.

## Fish Passage Barriers Corrected and Stream Miles Opened



Number reflects the estimated number of barriers corrected statewide in a given year. Because of incomplete reporting, these numbers are expected to be lower than actual values.

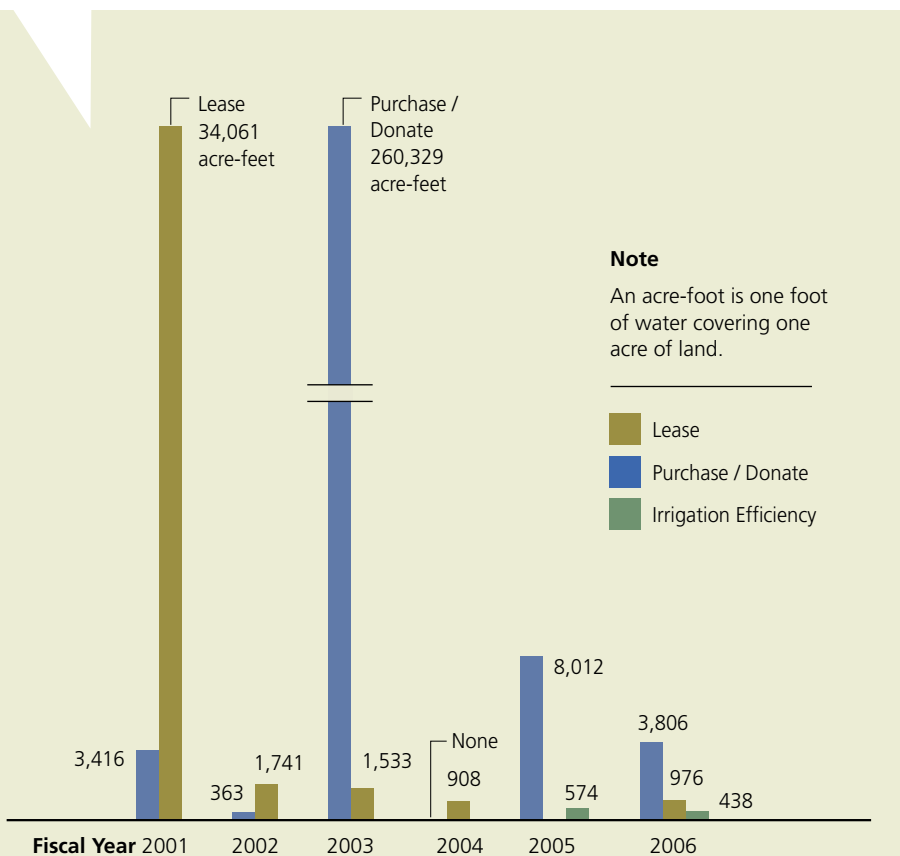
Miles reflect the number of miles that are estimated to be opened as a result of barrier correction by year.

2006 data not complete at time of publication

DATA SOURCES: WASHINGTON DEPARTMENT OF FISH AND WILDLIFE, WASHINGTON DEPARTMENT OF NATURAL RESOURCES, WASHINGTON DEPARTMENT OF TRANSPORTATION, SALMON RECOVERY FUNDING BOARD, FORESTS AND FISH, TRIBES AND LOCAL GOVERNMENTS. US FOREST SERVICE DATA AND BUREAU OF LAND MANAGEMENT INCLUDED AFTER 2002.



## Acre-Feet of Water Restored to Streams



► **Restored water** includes water from purchases, donations, or leases. The focus is on summer low flow periods and instream reaches where water availability is a limiting factor for fish.

► Irrigation efficiencies restored to streams not tracked prior to 2005.

► FY2003 represents a major commitment of federal funds to the Yakima River Enhancement Project.

► 300,000 acre-feet is almost 100,000 billion gallons—enough water to support the population Washington for almost 4 years.

DATA SOURCE: WASHINGTON DEPARTMENT OF ECOLOGY

## Endangered Species Act Compliant Harvest Goals

Puget Sound Chinook	1999	2000	2001	2002	2003	2004	2005
Hood Canal Summer Chum	1999	2000	2001	2002	2003	2004	2005
Snake River Sockeye	1999	2000	2001	2002	2003	2004	2005
Lower Columbia River Chum	1999	2000	2001	2002	2003	2004	2005
Lower Columbia River Steelhead	1999	2000	2001	2002	2003	2004	2005
Upper, Mid Columbia River and Snake River Steelhead	1999	2000	2001	2002	2003	2004	2005
Snake River and Upper Columbia River Spring Chinook	1999	2000	2001	2002	2003	2004	2005
Snake River Fall Chinook	1999	2000	2001	2002	2003	2004	2005

► Data are for non-tribal fisheries.

► NOAA-Fisheries has determined that established harvest protection goals do not negatively impact stocks or the ability to recover them.

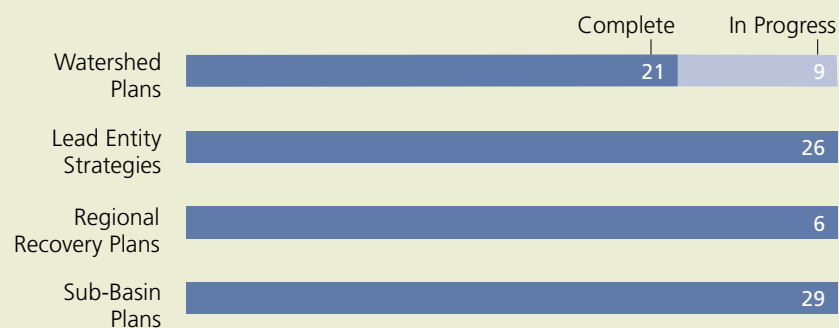
■ Fisheries met ESA harvest goals approved by NOAA-Fisheries

■ Fisheries exceeded ESA harvest goals approved by NOAA-Fisheries by up to 15%

■ Harvests exceed compliance with NOAA-Fisheries goals by less than 5%

DATA SOURCE: WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

## Salmon Recovery Plan Status



► Watershed plans are developed under the Watershed Planning Act (RCW 90.82).

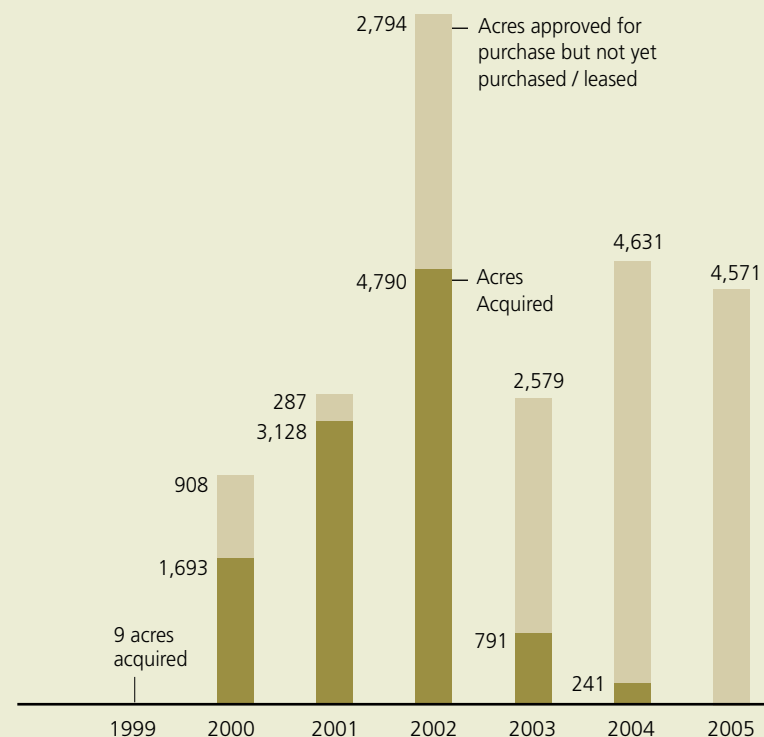
► Lead Entity Strategies are developed under the Salmon Recovery Act (RCW 77.85). A strategy is a habitat protection and restoration action plan for a watershed(s).

► Regional recovery plans are developed under the Salmon Recovery Act (RCW 77.85). All were submitted to NOAA-Fisheries by June 2005; they included one sub-regional (ESU) plan.

► Sub-basin plans are done under the Northwest Power and Conservation Council.

DATA SOURCE: GOVERNOR'S SALMON RECOVERY OFFICE

## Acres Acquired for Salmon Restoration (Proposed)

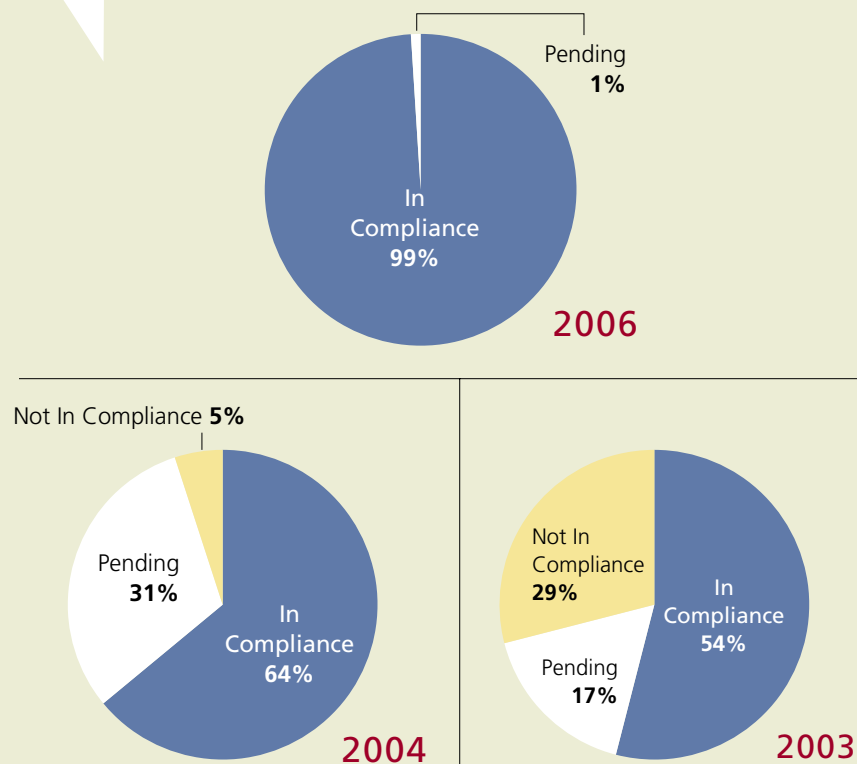


► Funding by Salmon Recovery Funding Board.

► Acres have been approved for purchase but actual acquisitions may be less.

DATA SOURCE: INTERAGENCY COMMITTEE FOR OUTDOOR RECREATION.

## Hatchery Management Plans Meeting Endangered Species Act



► ESA compliance is measured by Hatchery Genetic Management Plans (HGMP) approved by NOAA-Fisheries and USFWS; a hatchery in compliance with ESA is consistent with wild salmon recovery.

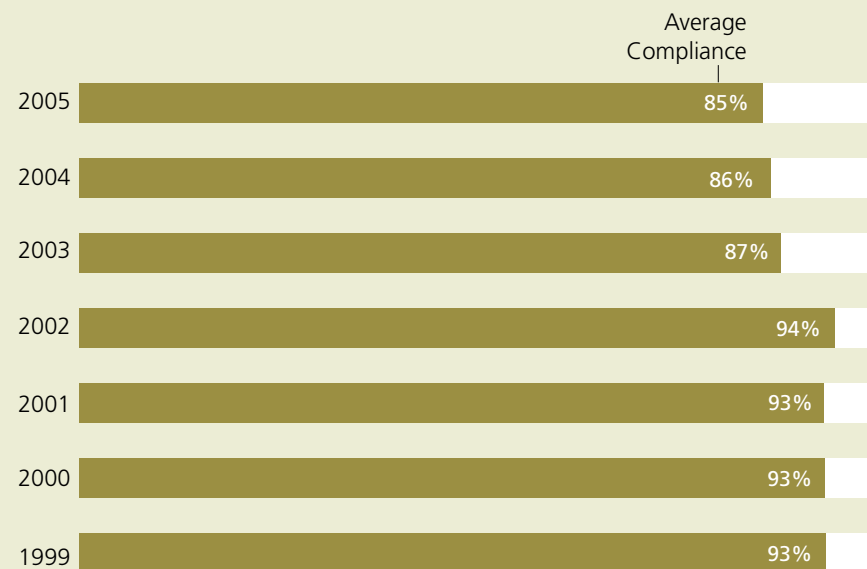
► 418 hatchery programs included in 2003 and 2004.

► 422 hatchery programs included in 2006.

► 1% pending includes HGMPs for newly added programs not yet submitted to NOAA.

DATA SOURCE: WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

## Average Compliance Rate for Salmon and Steelhead Fishers



**1999** Compliance based on 2,506 arrests and written warnings during 35,548 contacts.

**2000** 3,570 arrests and written warnings during 49,603 contacts.

**2001** 4,168 arrests and written warnings during 57,035 contacts.

**2002** 2,749 arrests and written warnings during 46,343 contacts.

**2003** 6,768 violators during 53,189 contacts. **Note:** 2003 data differ from previous years and are reflective of a new activity reporting system for officers and revised definition of "violators."

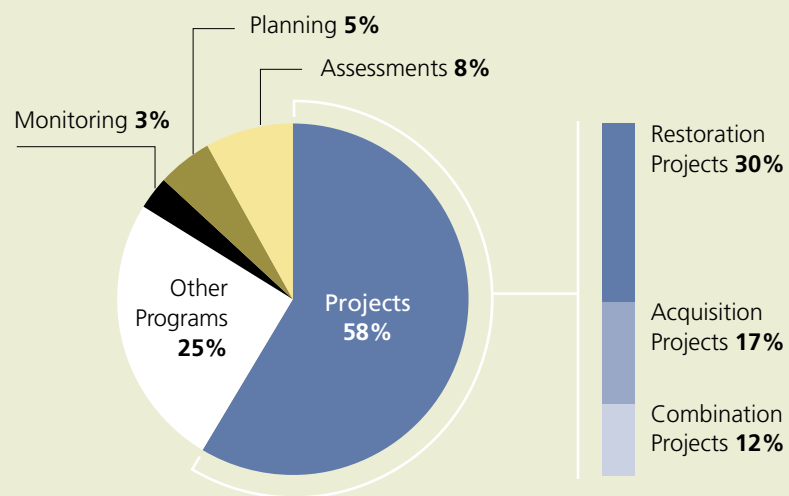
**2004** 6,730 violators during 49,621 contacts.

**2005** 7,300 violators during 78,355 contacts.

DATA SOURCE: WASHINGTON DEPARTMENT OF FISH AND WILDLIFE



## Salmon Recovery Funding Board (SRFB) Grants

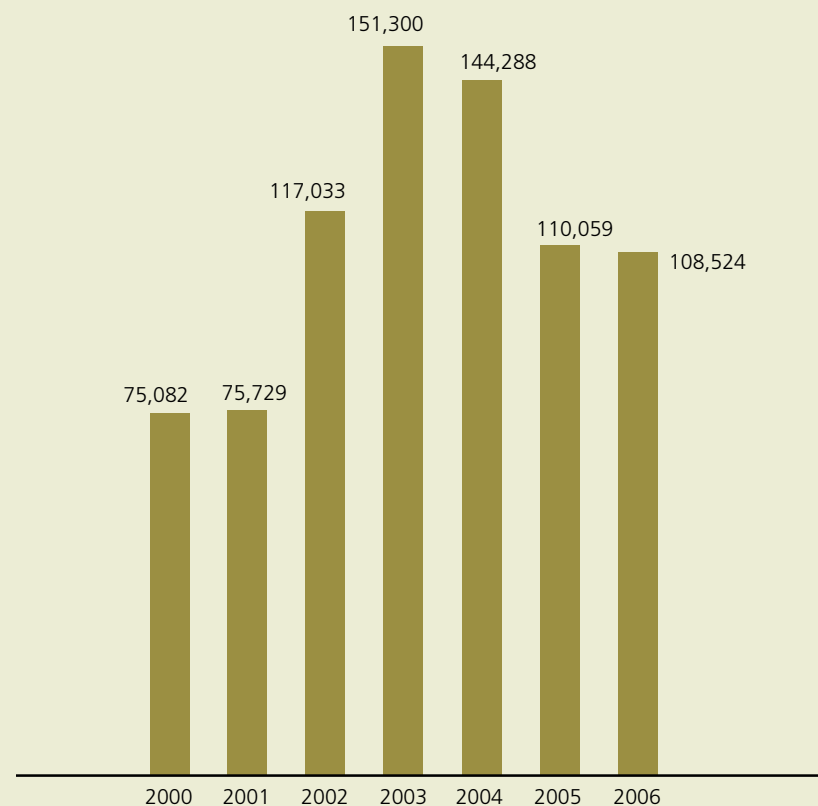


- Combination projects include both acquisition and restoration work.
- Other programs include those required or recommended by Congress, the Legislature, and NOAA-Fisheries, including Forests and Fish implementation, fish marking, lead entity support and other agency programs.

- FY2000-FY2005
- Sponsor matches exceed \$87.8 million.
- 718 projects funded.

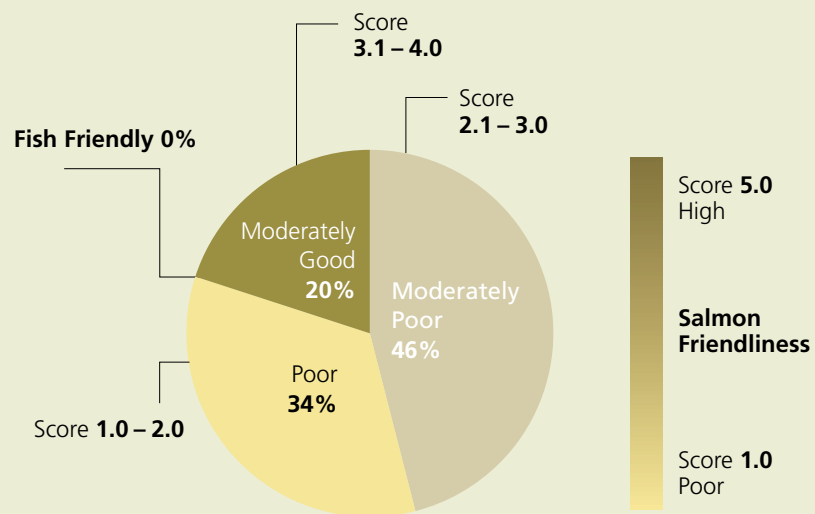
DATA SOURCE: INTERAGENCY COMMITTEE FOR OUTDOOR RECREATION.

## Volunteer Hours in Watershed and Salmon Recovery Activities



DATA SOURCES INCLUDE WASHINGTON DEPARTMENT OF FISH AND WILDLIFE, REGIONAL FISHERIES ENHANCEMENT GROUPS, WASHINGTON DEPARTMENT OF ECOLOGY, PLANNING UNITS, REGIONAL PLANNING ORGANIZATIONS, AND CONSERVATION COMMISSION.

## Salmon Friendliness of Hydroelectric Projects



► Projects were evaluated on the basis of adult passage and survival, juvenile passage and survival, water quality, flow regulation, mitigation for salmon production and/or habitat loss, license or operation guidelines, and cumulative impacts.

► 54 hydroelectric projects licensed by the Federal Energy Regulatory Commission (FERC) were considered.

**//** The first man to discover Chinook salmon in the Columbia, caught 264 in a day and carried them across the river by walking on the backs of other fish. His greatest feat, however, was learning the Chinook jargon in 15 minutes from listening to salmon talk. **//**

**NATIVE AMERICAN  
LEGEND**

DATA SOURCE: DEPARTMENT OF FISH AND WILDLIFE